LinksNews



Volume XXXIX-B1

Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XXXIX-B1, 115-120, 2012 www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XXXIX-B1/115/2012/ doi:10.5194/isprsarchives-XXXIX-B1-115-2012 © Author(s) 2012. This work is distributed under the Creative Commons Attribution 3.0 License.

lomeThe SocietyMembersCommissionsDocumentsPublicationsEducationCalendar

## A SURVEY OF LANDNET SITES FOCUSING ON TUZ GÖLÜ SALT LAKE, TURKEY

S. Z. Gürbüz<sup>1,2</sup>, H. Özen<sup>1</sup>, and G. Chander<sup>3</sup>

<sup>1</sup>TUBITAK Space Technologies Research Institute, Ankara, Turkey

<sup>2</sup>TOBB Univ. of Economy and Technology, Dept. of Elec. and Electronics Eng., Ankara, Turkey

<sup>3</sup>SGT, Inc., contractor to the U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center, Sioux Falls, SD, 57198, USA

Keywords: Remote Sensing, Satellite, Sensor, Calibration, Comparison, CEOS WGCV IVOS, LANDNET, Sites

Abstract. Radiometric calibration is critical to ensure the accuracy, veracity, continuity and reliability of satellite data measured from multiple sensors and platforms, and is thus recognized as a key activity by all satellite operators. For imaging sensors, vicarious methods using natural targets (such as salt lakes, deserts, or flatlands that are wellcharacterized and preferably temporally and spatially stable) as a reference are similarly well established. However, while selecting a target site, it is important that its guality and location are selected to minimize sources of uncertainty for any given sensor. To maximize the benefit from limited resources and minimize the impact on satellite operators, the Infrared Visible Optical Sensor (IVOS) sub-group of Committee on Earth Observation Satellites (CEOS) Working Group on Calibration and Validation (WGCV) has selected a few, well-characterized, regularly instrumented target sites, which have since become known as LANDNET sites. Currently, there are eight LANDNET sites: 1) Dome C, Antarctica; 2) Dunhuang, China, Asia; 3) Lspec Frenchman Flat, NV, USA, North America; 4) Ivanpah, NV/CA, USA, North America; 5) La Crau, France, Europe; 6) Negev, Southern Israel, Asia; 7) Railroad Valley Playa, NV, USA, North America; 8) Tuz Gölü, Central Anatolia, Turkey, Asia. This work summarizes the key characteristics, and areas of application of each of the LANDNET sites, especially that of Tuz Gölü, to guide and inform researchers on site selection, and increase international awareness and collaboration in this field. Additionally, detailed information about the Tuz Gölü, Turkey test site is provided, including geographical characteristics, spatial uniformity qualities, and opportunities for international researchers to conduct experiments and measurements. Practical, technical, and logistical experience gained through the international field campaigns organized over the last few years at Tuz Gölü is also shared in detail.

## Conference Paper (PDF, 630 KB)

Citation: Gürbüz, S. Z., Özen, H., and Chander, G.: A SURVEY OF LANDNET SITES FOCUSING ON TUZ GÖLÜ SALT LAKE, TURKEY, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XXXIX-B1, 115-120, doi:10.5194/isprsarchives-XXXIX-B1-115-2012, 2012. ↑ Top | Last Change 01-Apr-2013 (Problems and/or queries, send e-mail: 🔤 wm) | © ISPRS | Imprint